

COMPUTERIZED MEDICAL IMAGING AND GRAPHICS

Volume 22 Number 1

1998

CONTENTS

*P. S. Cho, K. L. Lindsley, J. G. Douglas,
K. J. Stelzer and T. W. Griffin*

*Y. Amano, K. Gemma, H. Kawamata and
T. Kumazaki*

*A. Butt, R. Acharya, C. Sibata and
K. H. Shin*

D. Okkalides

J. Zhang and H. K. Huang

*N. Tomura, H. Hirano, R. Sashi,
M. Hashimoto, K. Kato, S. Takahashi,
O. Watanabe and J. Watarai*

*J. D. Casas, A. Mariscal and
E. Barluenga*

R. N. Sener

R. N. Sener

*N. Elmas, C. Çalli, R. Killi, A. Memis,
O. Oyar and A. Mentes*

R. N. Sener

*H. Hirano, N. Tomura, J. Watarai
and T. Kato*

*R. Savas, C. Calli, N. Yünten and
H. Alper*

*A. S. Tu, Mai-Huong, T. Tran and
C. R. Larsen*

1 Digital radiotherapy simulator

9 Intraluminal signal intensity of iliac artery stents investigated by contrast-enhanced three-dimensional MR angiography

13 Surface matching of multimodality image volumes by a fuzzy elastic registration technique

25 Assessment of commercial compression algorithms, of the lossy DCT and lossless types, applied to diagnostic digital image files

31 Multilevel adaptive process control of acquisition and post-processing of computed radiographic images in picture archiving and communication system environment

41 Comparison of MR imaging and CT in discriminating tumor infiltration of bone and bone marrow in the skull base

53 Scrotal cystocele: US and CT findings in two cases

57 Lesions affecting the claustrum

63 Cerebellar involvement in tuberous sclerosis

67 Partially thrombosed hepatic artery aneurysm mimicking pancreatic head carcinoma

71 Hereditary nephritis (Alport syndrome): MR imaging findings in the brain

73 Caudal regression syndrome: MR appearance

77 Hypoplastic lumbar pedicle in association with conjoined nerve root MRI demonstration

81 CT-appearance of intraluminal duodenal diverticulum. The halo sign

85 Announcements

Volume 22 Number 2**1998****CONTENTS****SPECIAL ISSUE: BIOMEDICAL APPLICATIONS***Guest Editor: A. Del Bimbo**A. Del Bimbo*

87 Guest Editor's Introduction to Special Issue on
'Biomedical Applications'

*D. L. Farkas, C. Du, G. W. Fisher,
C. Lau, W. Niu, E. S. Wachman and
R. M. Leverson*

89 Non-invasive image acquisition and advanced processing in optical bioimaging

T. M. Buzug and J. Weese

103 Image registration for DSA quality enhancement

*R. Van de Walle, I. Lemahieu and
E. Achten*

115 Two motion-detection algorithms for projection-reconstruction magnetic resonance imaging: theory and experimental verification

*F. Bello, A. C. F. Colchester and
S. A. Röll*

123 A geometry- and intensity-based partial volume correction for MRI volumetric studies

A. Neumann and C. Lorenz

133 Statistical shape model based segmentation of medical images

S. Sarkar and S. Chaudhuri

145 Evaluation and progression analysis of pulmonary tuberculosis from digital chest radiographs

*K. Kanazawa, Y. Kawata, N. Niki,
H. Satoh, H. Ohmatsu, R. Kakinuma,
M. Kaneko, N. Moriyama and K. Eguchi*

157 Computer-aided diagnosis for pulmonary nodules based on helical CT images

*J. M. Pardo-López, D. Cabello,
J. Heras and J. Couceiro*

169 A Markov random field model for bony tissue classification

179 Announcements

Volume 22 Number 3**1998****CONTENTS***A. Hammoude*

181 Endocardial border identification in two-dimensional echocardiographic images: review of methods

*M. Mazonakis, J. Damilakis
and H. Varveris*

195 Bladder and rectum volume estimations using CT and stereology

*A. Ghanei, H. Soltanain-Zadeh and
J. P. Windham*

203 Segmentation of the hippocampus from brain MRI using deformable contours

*M. Stuber, E. Nagel, S. E. Fischer,
M. A. Spiegel, M. B. Scheidegger
and P. Boesiger*

217 Quantification of the local heartwall motion by magnetic resonance myocardial tagging

*M. Loughlin, I. Carlbom, C. Busch,
T. Douglas, L. Egevad, H. Frimmel,
M. Norberg, I. Sesterhenn and
J. M. Frogge*

229 Three-dimensional modeling of biopsy protocols for localized prostate cancer

*T. Nanimoto, S. Morishita,
R. Saitoh, J. Kudoh, Y. Yamashita
and M. Takahashi*

*D. J. Goodenough, J. R. Levy and
C. Kasales*

*K. Suetake, Y. Kurokawa, T. Uede,
H. Momota and K. Hashi*

R. N. Sener

239 The value of dynamic MR imaging for hypointensity
lesions of the peripheral zone of the prostate

247 Development of phantoms for spiral CT

257 A case of abducens neurinoma mimicking acoustic
neurinoma

263 Choroid plexus papilloma of the temporal horn
associated with transtentorial herniation

265 Announcements

Volume 22 Number 4

1998

CONTENTS

*T. Heinonen, K. Visala, M. Blomqvist,
H. Eskola and H. Frey*

*B. Diallo, F. Dolidon, J.-M. Travere
and B. Mazoyer*

*A. Herment, E. Mousseaux, P. Dumée
and A. Decesare*

*T. Nanimoto, Y. Yamashita,
H. Yamamoto, Y. Abe, K. Mitsuzaki
and M. Takahashi*

*C. Badea, Z. Kolitsi and
N. Pallikarakis*

A. T. Montoya and J. Pereira

*J. Kivijärvi, T. Ojala, T. Kaukoranta,
A. Kuba, L. Nyul and O. Nevalainen*

R. Nuri Sener

R. Nuri Sener

R. Nuri Sener

A. H. Karantanas

*A. Vade, C. Sajous, B. Anderson
and M. Challapalli*

R. Nuri Sener

267 3D visualization library for multimodal medical images

275 VoxelLine: a software program for 3D real-time
visualization of biomedical images

291 Automatic detection of left ventricular borders on
electron beam CT sequential cardiac images using an
adaptive algorithm

301 High resolution breath-holding MR imaging of the
abdomen with a phased-array multicoil

309 A wavelet-based method for removal of out-of-plane
structures in digital tomosynthesis

317 Testing the precision of stereotactic planning systems

323 A comparison of lossless compression methods for
medical images

341 A flow artefact in the frontal horns of the lateral
ventricles on MR images at 0.5 tesla

345 Aventriculi associated with holoprosencephaly

349 A patient with ectodermal dysplasia, Joubert's syn-
drome, and brain cysts

353 Amyotrophic lateral sclerosis: unilateral T_2 -shortening
on MRI

357 Neonatal hepatic abscess

361 Osteochondroma of the thoracic spine: a dumbbell mass
associated with spinal cord compression

Volume 22 Number 5**1998****CONTENTS***G. Dougherty**M. G. Fleming, C. Steger,
J. Zhang, J. Gao, A. B. Cognetta,
I. Pollak and C. R. Dyer**M. C. Gilardi, G. Rizzo, A. Savi,
C. Landoni, V. Bettinardi,
C. Rossetti, G. Striano and
F. Fazio**C. Pachai, Y. M. Zhu, J. Grimaud,
M. Hermier, A. Dromigny-Badin,
A. Boudraa, G. Gimenez,
C. Confavreux and J. C. Froment**R. Nuri Sener**R. Nuri Sener**C. Asao, Y. Korogi, O. Shimomura,
M. Takahashi and T. Tsuru**O. Oyar, G. Kayalioglu and
U. Cagirici**K. Toda, Y. Yasunaga, S. Takemoto
and Y. Terada*

365 Computerized evaluation of mammographic image quality using phantom images

375 Techniques for a structural analysis of dermatoscopic imagery

391 Correlation of SPECT and PET cardiac images by a surface matching registration technique

399 A pyramidal approach for automatic segmentation of multiple sclerosis lesions in brain MRI

409 Cranial MR imaging findings in Waardenburg syndrome: anophthalmia, and hypothalamic hamartoma

413 A false lesion in the center of the pons on magnetic resonance images

417 MR findings of hypoxic damage of the bilateral striate cortices: a case report

421 Diaphragmatic crus lipoma: a case report

425 MR image and CT scan of a tuberculous abscess in the gluteus maximus muscle

Volume 22 Number 6**1998****CONTENTS***Y.-F. Wang, D. R. Uecker and
Y. Wang**Y. Kurihara, Y. Okuhara, Y. Narita,
Y. Kitazoe, A. Sawada, S. Yoshida
and H. Geshi**R. Tello, R. F. Munden, S. Hooton,
K. Kandarpa and R. Pugatch**S. L. Hartmann, B. M. Dawant,
M. H. Parks, H. Schlack and
P. R. Martin**M. S. Brown, L. S. Wilson,
B. D. Doust, R. W. Gill and
C. Sun*

429 A new framework for vision-enabled and robotically assisted minimally invasive surgery

439 Fast image accessing based on an analysis of the picture archiving and communications system in Kochi Medical School

447 Value of spiral CT in hemodynamically stable patients following blunt chest trauma

453 Image-guided MR spectroscopy volume of interest localization for longitudinal studies

463 Knowledge-based method for segmentation and analysis of lung boundaries in chest X-ray images

*S. Eldar, E. Sabo, A. Cohen,
I. Miszelevich, O. Cohen, J. Kelner,
C. Mor, J. Shvero, R. Feinmesser, J. Shibi,
M. Shabtai, J. Bejar and J. H. Boss*

479 Computer-assisted image analysis of small cell lymphoma of the thyroid gland. Comparison of nuclear parameters of small lymphocytes in lymphomas and Hashimoto's thyroiditis